

Election/Restrictions

- Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1–6, drawn to a first method, a method of loading a disaccharide into a mammalian nucleated cell, classified in class 435, subclass 325+ and others depending on the cell type.
 - II. Claims 11–16, 21, 22 , drawn to a second method, a method of increasing survival of mammalian nucleated cells after dehydration and rehydration comprising contacting the cell with a disaccharide and a heat shock protein, classified in class 435, subclass 325+ and others depending on cell type.
 - III. Claims 17–18, 21, 22, drawn to a third method, a method of increasing survival of mammalian nucleated cells after dehydration and rehydration comprising contacting the cell with a disaccharide and an apoptosis inhibitor, classified in class 435, subclass 325+ and others depending on cell type.
 - IV. Claims 19, 23, drawn to a fourth method, a method of increasing survival of mammalian nucleated cells after dehydration and rehydration comprising contacting the cell with a disaccharide and arbutin or hydroquinone, classified in class 435, subclass 325+ and others depending on cell type.
 - V. Claim 20, drawn to a fifth method, a method of increasing survival of mammalian nucleated cells after dehydration and rehydration comprising contacting the cell with a disaccharide and dimethylsulfoxide, classified in class 435, subclass 325+ and others depending on cell type.
 - VI. Claims 25–28, drawn to a sixth method, a method of increasing the survival of mammalian nucleated cells after dehydration and

rehydration comprising contacting the cells with an apoptosis inhibitor, classified in class 435, subclass 325+ depending on cell type.

- VII. Claims 29–35, drawn to a seventh method, a method of increasing the survival of mammalian nucleated cells after dehydration and rehydration comprising contacting the cells with a heat shock protein, classified in class 435, subclass 325+ and others depending on cells type.
- VIII. Claims 36–37, drawn to an eighth method, method of increasing the survival of mammalian nucleated cells after dehydration and rehydration comprising contacting the cells with arbutin or hydroquinone, classified in class 435, subclass 325+ and others depending on cell type.
- IX. Claims 38–43, drawn to a composition comprising a nucleated mammalian cell, disaccharide and arbutin or hydroquinone, class 435, subclass 93.21 and others depending on cell type.
- X. Claims 44–45, drawn to a composition comprising a nucleated mammalian cell, disaccharide and a heat shock protein, class 435, subclass 93.21 and others depending on cell type.
- XI. Claims 46–47, drawn to a composition comprising a nucleated mammalian cell, disaccharide and apoptosis inhibitor, class 435, subclass 93.21 and others depending on cell type.

Claims 7–24, Groups II, III, IV, V are directed to combinations and subcombination type claims.

Inventions II, III, IV, V are directed to related inventions. The related inventions are distinct if: (1) the inventions as claimed are either not capable of

use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed are mutually exclusive because the component required by one group is not required by the other groups. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

Claim 7 links inventions II, III, IV and V. The restriction requirement for the linked inventions is subject to the nonallowance of the linking claim, claim 7. Upon the indication of allowability of the linking claim, the restriction requirement as to the linked inventions shall be withdrawn and any claim depending from or otherwise requiring all the limitations of the allowable linking claim will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104. Claims that require all the limitations of an allowable linking claim will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicants are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Claims 7-10, 24 will be examined if Group II, III, IV or V is elected.

Inventions I and II-VIII are distinct.

The processes are distinct from one another because they recite different and distinct steps and purposes. Groups II-VIII are directed to increasing the survival of cells after drying and rehydration, while group I is merely a method of loading a disaccharide into cells. Groups II-VIII are distinct because they require contacting cells with distinct compounds, that is, Groups II-V requires a disaccharide and a second compound, while Groups VI, VII, VIII do not require a disaccharide. The products IX, X and XI are distinct from one another because they have distinct components.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

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Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

In addition if Group II is elected, a further election of species must be made.

This application contains claims directed to the following patentably distinct species, claim 12, induction of heat shock protein, claim 14, addition of

heatshock protein to medium, claim 15, expression of heat shock protein by introduced nucleic acid sequence. The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 7 is generic.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the

election, applicant must indicate which of these claims are readable on the elected species.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra Saucier whose telephone number is (571) 272-0922. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, M. Wityshyn can be reached on (571) 272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sandra Saucier/
Primary Examiner
Art Unit 1651